UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
TSEGAYE, SABA

ART UNIT	PAPER NUMBER
2662	

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 December 2004</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 7-45* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 7-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
     Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   This is a response to the amendment filed 12/06/04. Claims 1-5 and 7-45 are pending.

Currently no claims are in condition for allowance.

Claim Objections

2.   Claim 31 is objected to because of the following informalities: claim 31 is identical with

claim 30. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3.   Claims 1-5, 10-22, 26-38 and 42-45 are rejected under 35 U.S.C. 102(b) as being

anticipated by Pendleton et al. (USPN 5,982,753), hereafter referred to as Pendleton.

Referring to claims 1 and 14, Pendleton discloses a method of monitoring a network

switch (14) (a method of monitoring a switch using test equipment (see figures 1-3 and column

5), having a plurality of regular ports and a mirror port (see ports 11, 12, 16, 20 and 22 in figures

1 and 2), between which network traffic data packets are forwarded and a mirror port (traffic

send between nodes of the LAN are IP packets (see columns 1 and 5)) comprising:

selecting at least one of said regular ports (a port is selected to connect the test

equipment; also see item 200 in Fig. 6)

mirroring a data packet of the selected port to said mirror port (the test equipment uses

passive monitoring to receive packets that are transported between network nodes (all traffic

exchanged between two ports is forwarded to the port tap 12; the test equipment uses passive

monitoring to receive packets that are transported between network nodes (see columns 5 and

7));

extracting the network address information of said mirrored data packet (capturing the

network traffic traveling between the network devices (column 5, lines 19-23 &); test equipment

uses passive monitoring to perform a discovery process which allows the test equipment to

extract MAC and/or IP address from the passively monitored packets (see figure 6 and columns

5 and 7));

determining port information of said network address information ((fig. 1, when traffic

captured that traveled between the network devices, it is inherent to determine port information

in order to forward the data packet to the destination); further the test equipment uses MIBs to

build a port table (see item 47 in figure 5)) and

performing network analysis of said network switch (the test equipment analyzes reports

regarding the ports and related traffic through the switch (see column 8; column 5, lines 19-27)).

Referring to claims 2 and 15, Pendleton discloses that said port information refers to

physical information of said network address information in said network switch (the port

number corresponds to the physical port that the network node is attached to (see figures 2 and

3)).

Referring to claims 3 and 36, Pendleton discloses that said port information

determination comprises interrogating said switch to obtain said port information using said

network address information (the switches MIBs can also be requested in order to build the port

table (see column 7 and figure 5)).

Referring to claims 4 and 37, Pendleton discloses that said interrogating step comprising

sending a first request to said network switch requesting a port index corresponding to said

network address information (the test equipment queries the switch using SNMP in order to get

MIBs that show port information (see columns 6 and &)) and sending a second request to said

network switch requesting said port information corresponding to said port index (various MIBs

can be selected which show the port information (see figure 5)).

Referring to claims 5 and 38, Pendleton discloses that said first request and said second

request are SNMP requests (the test equipment requests the Mms from the switch uses SNMP

queries (see column 6)).

Referring to claims 10, 26 and 42, Pendleton discloses maintaining at least one lookup

table correlating said network address information with said port information (a port table is

maintained (see item 47 in figure 5)).

Referring to claims 11 and 12, Pendleton discloses that said network address information

comprises source address and the destination address of said mirrored data packet (the passive

discovery process includes the test equipment receiving IP packets that have been transmitted

using the TCP/IP protocol and it is part of this standard to have the source and destination

addresses of the packet included in each packet to allow for proper routing, thus the packets

received by the test equipment have the source and destination addresses of where that packet

came from and where they are going to (see fig. 1 and columns 5-7)).

Referring to claims 13, 27 and 43, Pendleton discloses that said network switch is a

routing switch (the switch routs packets over a switches network (see figures 1-3)).

Referring to claim 16, Pendleton discloses that said network switch having a plurality of

regular ports and a mirror port (see ports 11,16,20 and 22 in figures 1 and 2), said mirror port

being able to mirror network traffic for at least one of said regular ports (the test instrument can

passively receive traffic that it transported between network nodes (see figures 1-3 and column

5)), wherein said portion of data packets are obtained from said mirror port (the switch and the

test equipment are coupled to each other (see figures 1 and 2)).

Referring to claims 17, 18, 33 and 34, Pendleton discloses that said network address

information comprises source address and the destination address of said data packet (the passive

discovery process includes the test equipment receiving IP packets that have been transmitted

using the TCP/IP protocol and it is part of this standard to have the source and destination

addresses of the packet included in each packet to allow for proper routing, thus the packets

received by the test equipment have the source and destination addresses of where that packet

came from and where they are going to (see columns 5-7)).

Referring to claim 19, Pendleton discloses that said network switch comprising a plurality of regular ports (the switch has a plurality of ports (see figures 1-3)), wherein said data packets are forwarded to said monitor device by passively tapping at least one of said regular ports (the test equipment passively taps into the switch (see figures 1-3 and columns 5 and 7)).

Referring to claim 20, Pendleton discloses that said determining step comprising: interrogating said switch to obtain said port information using said network address information (the switches MIBs can also be requested in order to build the port table (see column 7 and figure 5)).

Referring to claim 21, Pendleton discloses that said interrogating step comprising sending a first request to said network switch requesting a port index corresponding to said network address information (the test equipment queries the switch using SNMP in order to get Mrns that show port information (see columns 6 and &)) and sending a second request to said network switch requesting said port information corresponding to said port index (various MDs can be selected which show the port information (see figure 5)).

Referring to claim 22, Pendleton discloses that said first request and said second request are SNMP requests (the test equipment requests the Mms from the switch uses SNMP queries (see column 5)).

Regarding claim 28, Pendleton discloses a method t monitor a network switch,

comprising:

obtaining at least a portion of data packets being handled by the network switch, wherein

each of the data packets comprises network address information (the test equipment uses passive

monitoring to receive packets that are transported between network nodes (see columns 5 and

7&) fig. 1 shows; monitoring network traffic through mirror port 12);

extracting the network address information from the data packets (capturing the network

traffic traveling between the network devices (column 5, lines 19-23 &); test equipment uses

passive monitoring to perform a discovery process which allows the test equipment to extract

MAC and/or IP address from the passively monitored packets (see figure 6 and columns 5 and

7)); and

determining port information of the network address information (when traffic captured

that traveled between the network devices, it is inherent to determine port information in order

to forward the data packet to the destination (see column 5, lines19-23); further the test

equipment uses MIBs to build a port table (see item 47 in figure 5)).

Regarding claim 29-31 Pendleton discloses that said port information refers to physical

information of said network address information in said network switch (the port number

corresponds to the physical port that the network node is attached to (see figures 2 and 3)).

Regarding claim 32, Pendleton discloses the method that said network switch having a

plurality of regular ports (see Figs. 1-3) and a mirror port (11, 12), said mirror port being able to

mirror network traffic for at least one of the regular ports, wherein said portion of data packets are obtained from said mirror port (the test equipment uses passive monitoring to receive packets that are transported between network nodes (see columns 5 and 7)).

Regarding claim 35, Pendleton discloses the method that said network switch comprising a plurality of regular ports 9see figures 1-3), wherein said data packets are obtained by passively tapping at least one of said regular ports (the test equipment uses passive monitoring to receive packets that are transported between network nodes (see columns 5 and 7)).

Regarding claim 44, Pendleton discloses the method further comprising associating the port information with information contained in the data packets ((fig. 1, when traffic captured that traveled between the network devices, it is inherent to determine port information in order to forward the data packet to the destination); further the test equipment uses MIBs to build a port table (see item 47 in figure 5)).

Regarding claim 45, Pendleton discloses the method, further comprising performing network analysis of said network switch using said port information and associated data packet information (the test equipment uses passive monitoring to receive packets that are transported between network nodes (see columns 5 and 7)).

Claim Rejections - 35 USC § 103

4.   Claims 7-9, 23-25 and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Pendleton in view of Niestegge (USPN 4,922,488), hereafter referred to as Niestegge.

Referring to claims 7-9 and 23-25, Pendleton does not disclose placing packets in a FIFO

and releasing them form the FIFO after the SNMP response or after a predetermined time period.

However, Niestegge discloses a system wherein packets are stored in a FIFO and release

after a particular time (see column 3 lines 20-60)).

It would have been obvious to one skilled in the art at the time of the invention to

implement this feature into the Pendleton system because using the buffer would allow the

system to wait for a response to the SNMP query made by the test equipment and furthermore

FIFOs also provide an organized way of holding data so it is not lost, thereby making the

Pendleton system more reliable.

Response to Arguments

5.   Applicant's arguments filed 12/06/04 have been fully considered but they are not

persuasive. Applicant argues (Remarks, page 9) that Fig.1 of Pendleton does not determine port

information corresponding to the data packets within the network traffic. Examiner respectfully

disagrees. Pendleton discloses a method that accommodates troubleshooting and analysis

equipment by capturing the network traffic traveling between the network devices through mirror

port 12. It is also inherent having the capability of determining port information corresponding to

the data packets within the network traffic.

Further, Applicant argues (Remarks, page 10) that test analyzer 100 of Pendleton does

not determine port information by extracting network address information of data packets.

Examiner respectfully disagrees. The test instrument using a set of SNMP queries, determines

what MIBs are available in the switch. The MIBs provide more detailed statistical and error

information on any particular port of switch (column 2, lines 55-67). This shows that the test

instrument 100 obtain port information through MIBs (mirror through MIBs).

Conclusion

6.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Saba Tsegaye whose telephone number is (571) 272-3091. The

examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ST
April 27, 2005

JOHN PEZZLO
PRIMARY EXAMINER